

SAMOILOV, S.M., Cand <sup>Chem.</sup> ~~Phys.~~ Sci—(diss) "Composition, ~~the~~ porous and crystalline structure, and activity of  $W_2$ -catalyzers of destructive hydrogenation." Mos, 1958. 11 pp (Acad Sci USSR. Inst of Organic Chemistry in N.D. Zelinskiy), 150 copies (FI, 31-58, 99)

$WS_2$

AUTHORS: Samoylov, S. M., Rubinshteyn, A. M. 62-58-5-4/27

TITLE: Investigation on the Physical and Chemical Properties of the  $WS_2$ -Catalysts (Issledovaniye fizicheskikh i khimicheskikh svoystv  $WS_2$ -katalizatorov) Communication 2: Adsorption-Properties of Mixed  $WS_2$ -Clay Catalysts (Soobshcheniye 2. Adsorbtsionnyye svoystva smeshannykh katalizatorov  $WS_2$ -glina)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdeleniye Khimicheskikh Nauk, 1958, Nr 5, pp. 550 - 556 (USSR)

ABSTRACT: Regardless of the great importance of the mixed  $WS_2$ -catalyst ( $WS_2$  and alumina) the authors found not a single work dealing with the investigation of the adsorption-properties of these  $WS_2$ -catalysts. It is assumed that these catalysts prepared according to the same method by  $WS_2$  and various aluminae, must have a different pore-circumference, as well as different properties of catalyst. The properties of a simple (non-mixed)

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Investigation on the Physical and Chemical Properties 62-58-5-4/27  
of the  $WS_2$ -Catalysts. Communication 2: Adsorption-Properties of Mixed

$WS_2$ -Clay Catalysts

$WS_2$ -catalyst were already described in the previous work (Reference 8). In the present article the authors describe the adsorption-properties of 2 different catalysts consisting of  $WS_2$  and aluminae (Terran-and Tautiman-alumina). The adsorption-properties of the aluminae belonging to the mixed  $WS_2$ -catalysts were investigated. The investigation of the porous structure and of the size of the specific surface of the mixed  $WS_2$ -catalysts showed that this specific surface and the porous structure of the catalyst are determined by the specific surface of the alumina carrier. According to the given method of preparation the specific surface and the circumference of pores of the catalyst is smaller than the composition of aluminae in them. Tests carried out with respect to the adsorption of toluene from a solution in isooctane showed that the quantity of toluene-molecules in the adsorption-volume of the  $WS_2$ -catalysts is smaller than the quantity

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Investigation on the Physical and Chemical Properties 62-58-5-4/27  
 of the WS<sub>2</sub>-Catalysts. Communication 2: Adsorption-Properties of Mixed  
 WS<sub>2</sub>-Clay Catalysts

of nitrogen-molecules in the mono-molecular layer with the  
 adsorption of nitrogen (at the temperature of liquid nitro-  
 gen). The data obtained from previous works (Reference 4) were  
 compared to the adsorption-properties of the same type of cata-  
 lyst (which are described in this work). It was found in this  
 connection that a change of the catalytic activity with re-  
 spect to the conversion of benzene or cyclohexan (at 420°C and  
 an initial pressure of H<sub>2</sub> of 140 atmospheres), as well as  
 the change of the specific surface and of the pore-circum-  
 ference, are correlative (simbatno). There are 8 figures, 1  
 table and 14 references, 11 of which are Soviet.

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii  
 nauk SSSR (Institute for Organic Chemistry imeni N. D. Ze-  
 linskiy AS USSR)

SUBMITTED: February 12, 1957

Card 3/3

1. Catalysts--Properties
2. Tungsten sulfide--Applications
3. Aluminum oxides--Applications

AUTHORS: Samoylov, S. M., Rubinshteyn, A. M. 62-58-5-5/27

TITLE: Investigation of the Physical and Chemical Properties of the  $WS_2$ -Catalysts (Issledovaniye fizicheskikh i khimicheskikh svoystv  $WS_2$ -katalizatorov) Communication 3: Phase-Composition and Adsorption-Properties of the Mixed Catalyst  $WS_2$  - NiS -  $Al_2O_3$  (Soobshcheniye 3. Fazovyy sostav i adsorbtsionnyye svoystva smeshannogo katalizatora  $WS_2$  - NiS -  $Al_2O_3$ )

PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdeleniye Khimicheskikh Nauk, 1958, Nr 5, pp. 557 - 564 (USSR)

ABSTRACT: In spite of the valuable properties of the mixed  $WS_2$ -NiS- $Al_2O_3$ -catalyst, its structure has not been investigated with sufficient care up till now. There is only one work (Reference 9) on the electronmicroscopical investigation of its phase-composition. It was therefore of great interest to the authors of the present report, to obtain a detailed characteristic of this catalyst and of the kind of its catalytic activity. The experiment was carried out with 2 catalysts, viz. an investi-

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Investigation of the Physical and Chemical Properties 62-58-5-5/27  
of the  $WS_2$ -Catalysts. Communication 3: Phase-Composition and Adsorption-

-Properties of the Mixed Catalyst  $WS_2 - NiS - Al_2O_3$

gation by means of X-ray-structural analysis of the adsorption of the nitrogen-vapors (at the boiling-point of the liquid nitrogen) and by the adsorption of toluene and benzene and their solutions in isooctane at room-temperature. The presence of the phases:  $WS_2$ ,  $\gamma-Al_2O_3$ , the lack of mixed phases and the possibility of the presence of the phase  $Ni_3S_2$  were determined.

The specific surface and the adsorption-volume of the mixed  $WS_2-NiS-Al_2O_3$ -catalyst were determined by way of the adsorption of the nitrogen-vapors and the adsorption of toluene and benzene from their solutions in isooctane. Moreover, the porous structure of the same after the adsorption of the nitrogen-vapors was more closely defined: The porosity is not homogeneous, on the contrary, it shows large differences which cover a range from less than  $10 \text{ \AA}$  to more than  $150 \text{ \AA}$ . It was proved by means of comparison of the volume-distribution of the pores (radius and specific surfaces) attainable for the nitrogen-

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Investigation of the Physical and Chemical Properties 62-58-5-5/27  
of the  $WS_2$ -Catalysts. Communication 3: Phase-Composition and Adsorption-  
Properties of the Mixed Catalyst  $WS_2$  -  $NiS$  -  $Al_2O_3$

--molecules, as well as of the molecules of benzene and toluene on the one hand and the catalytic activity of the two test-catalysts on the other, that the surface of the catalyst which is not accessible to the toluene-molecules, does not take part in the reaction of the phenol-hydration (at  $380^\circ C$  and 110 to 120 atmospheres initial hydrogen pressure). There are 5 figures, 3 tables and 29 references, 17 of which are Soviet.

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR (Institute for Organic Chemistry imeni N. D. Zelinskiy AS USSR)

SUBMITTED: February 25, 1957

1. Catalysts--Properties
2. Tungsten sulfide--Applications
3. Nickel sulfide--Applications
4. Aluminum oxides--Applications

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SAMOYLOV, S. M.  
 AUTHORS: Samoylov, S. M., Slinkin, A. A., Rubinshteyn, A. M. 20-3-31/59  
 TITLE: The Investigation of the Phase Composition and of the Adsorption Properties of an Iron-Carbon Catalyst  
 (Issledovaniye fazovogo sostava i adsorbtsionnykh svoystv zhelezo-ugol'nogo katalizatora)  
 PERIODICAL: Doklady AN SSSR, 1958, Vol. 118, Nr 3, pp. 526-529 (USSR)  
 ABSTRACT: This work contains data on two specimens of an iron-carbon catalyst, which had not been put into operation. The specimen No. 1 was produced with 5,6 % Fe on activated carbon and specimen No. 2 of 10,5 % Fe on generator dust. Their activity was estimated from the hydration of 20 g phenol in the presence of 2,5 g of catalyst at 480°C and at an initial pressure of the H<sub>2</sub> of 114 atmospheres (duration of reaction 3 hours). Besides, after the adsorption of H<sub>2</sub> on the sample it was examined by structural X-ray and by magnetic methods. The results of these experiments are illustrated in 3 diagrams and in 1 table. The diffraction images of the examined samples almost did not differ from each other. The distances between the planes resembled the corresponding

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The Investigation of the Phase Composition and of the  
Adsorption Properties of an Iron-Carbon Catalyst

20-3-31/59

distances in the following individual compounds:  $\text{Na}_2\text{SO}_4$ ,  $\alpha\text{-Fe}_2\text{O}_3$ ,  $\gamma\text{-Fe}_2\text{O}_3$ ,  $\text{Fe}_3\text{O}_4$ ,  $\beta\text{-Fe}_2\text{O}_3 \cdot \text{H}_2\text{O}$ . It could not be ascertained, however, which iron oxides were really contained in the examined samples. By the structural X-ray method apart from ferric oxides also the presence of crystalline  $\text{Na}_2\text{SO}_4$  was found. This conclusion agrees well with the results of the measurement of the magnetic susceptibility. The results of the here performed investigations of the phase composition and of the magnetic properties speak against the assumption that the iron in the unused iron-carbon catalyst occurs only as a compound ( $\text{Fe}(\text{OH})_3$  or  $\text{Fe}(\text{OH})_2$ ). The unused catalyst contains a mixture of paramagnetic and ferromagnetic ferric oxides and perhaps also of  $\beta\text{-Fe}_2\text{O}_3 \cdot \text{H}_2\text{O}$ . The isothermal curves of the adsorption from a solution of iso-octane and the percentage of toluene in the adsorption volume of the catalysts were measured at room temperature. The comparison of the adsorption properties of the catalysts with the results of the hydration of phenol shows that the sample 1 was more active with regard to the rate of modification. The different activity of the samples 1 and 2 does not depend on the different iron percentage in

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- The Investigation of the Phase Composition and of the Adsorption Properties of an Iron-Carbon Catalyst

20-3-31/59

them. The selectivity of the effect of the specimens 1 and 2 was equal, as can be seen from the comparison with  $H_2$ . The active surface of the catalyst 1 with regard to the reversible chemisorption was  $16 \text{ m}^2/\text{g}$ , which is about 3 % of the specific surface, which was ascertained from the low-temperature adsorption of  $N_2$  vapors. There are 3 figures, 1 table, and 19 references, 16 of which are Slavic.

ASSOCIATION: Institute for Organic Chemistry imeni N. D. Zelinskiy AN USSR (Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR)

PRESENTED: July 22, 1957, by B. A. Kazanskiy, ~~Academician~~

SUBMITTED: July 12, 1957

AVAILABLE: Library of Congress

Card 3/3

KALECHITS, I.V.; PAVLOVA, K.A.; SAMOYLOV, S.M.

Effect of the recrystallization of the  $WS_2$  catalyst on its hydrogenating and isomerizing activities. *Trudy Vost.-Sib.fil.AN SSSR* no.18:81-86 '59. (MIRA 12:10)  
(Tungsten sulfide)

EL'TEKOV, Yu.A.; SAMOYLOV, S.M.

Sorption of nitrogen and benzene vapors by a tungsten sulfide catalyst. Izv.AN SSSR Otd.khim.nauk no.5:794-800 My '60.  
(MIRA 13:6)

1. Institut organicheskoy khimii im. N.D. Zelinskogo Akademii nauk SSSR.  
(Tungsten sulfide) (Nitrogen) (Benzene)

SAMOYLOV, S.M.

Physical and chemical properties of  $WS_2$  catalysts. Report  
No.6: Porous structure and chemical composition on unmixed  $WS_2$   
catalyst. Izv. AN SSSR, Otd.khim.nauk no.8:1416-1426 Ag '61.

(MIRA 14:8)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR i  
Vostochno-Sibirskiy filial Sibirskogo otdeleniya AN SSSR.  
(Tungsten sulfide)

БЕНЗЕН. С. П. ПЕТРОВА В. П.

Benzene hydrogenation under pressure in the presence of an  
iron-coal catalyst. Izv. Sib. otd. AN SSSR no. 9:119-122  
1961. (MIR. 14:10)

1. Vostochno-Sibirskiy filial Sibirskogo otdeleniya AN SSSR,  
Irkutsk.

(Benzene)  
(Hydrogenation)  
(Catalysts)

SAMOYLOV, S.M.

Physical and chemical properties of  $WS_2$ -catalysts. Report No.7:  
Hydrogenation of phenol under pressure in the presence of an unmixed  
 $WS_2$ -catalyst promoted by sulfur, selenium, tellurium, or phosphorus.  
Izv. AN SSSR. Otd.khim.nauk no.9:1559-1561 S '61. (MIRA 14:9)

1. Vostochno-Sibirskiy filial Sibirskogo otdeleniya AN SSSR.  
(Tungsten sulfide) (Phenols) (Hydrogenation)

SAMOYLOV, S.M.; ANDRIYEVSKIY, V.N.; KOTLYAREVSKIY, I.L.

Separate determination of small amounts of ethylene oxide, formaldehyde, and acetaldehyde in mixed aqueous solutions. Izv. AN SSSR Otd.khim.nauk no.2:201-208 F '62.

(MIRA 15:2)

1. Institut nefte- i uglekhimicheskogo sinteza AN SSSR.  
(Ethylene oxide)  
(Acetaldehyde)  
(Formaldehyde)



MALAYEV, I.I., gornyy inzhener; ~~SAMOYLOV, S.S.~~, gornyy inzhener; PETRENKO,  
G.G., gornyy inzhener

Independent flow of water into drill holes in horizontal mining.  
Bor'ba s sil. 2:99-102 '55. (MLBA 9:5)

1. Krivorozhskiy zhelezorudnyy bassey. (BORING) (DUST--PREVENTION)

L 38226-66 EWP(m)/EWT(1) WW

ACC NR: AP6024857

SOURCE CODE: UR/0056/66/0051/001/0013/0017

AUTHOR: Volkov, L. P.; Voronov, V. M.; Samylov, S. V.

ORG: none

TITLE: Some features of a shock wave produced by the explosion of a wire in air

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 51, no. 1, 1966, 13-17

TOPIC TAGS: exploding wire, shock wave, high temperature, ~~streak~~ photography

ABSTRACT: Results of an investigation of a shock wave in air during the initial stage of the explosion of a wire are presented. The streak photochronographic technique was used. The shock wave photochronograms were synchronized with current oscillograms. The experiments were performed with wires of various metals and diameters ranging from 0.03 to 0.8 mm. The initial electric field strengths ranged from 0.1 to 1 kv/mm. The following phases could be distinctly distinguished: linear expansion of the wire (stratification), the appearance of two shock waves, and electric breakdown. The conditions required for detecting these phases are formulated. It is believed that the second shock wave results from an increase in the dispersion rate of the metal vapor. This in turn is the result of rapid removal of magnetic-field counterpressure at the moment of current pause. Orig. art. has: 3 figures. [CS]

SUB CODE: 20/ SUBM DATE: 17Dec65/ ORIG REF: 004/ OTH REF: 003/ ATD PRESS: 5444

Card 1/145 <sup>44</sup>

SAMOYLOV, V.

Work practices of B.D.Miagkii, operator of soaking pits. Metallurg  
10 no.8:32-33 Ag '65. (MIRA 18:8)

1. Starshiy inzh. TSentral'noy nauchno-issledovatel'skoy  
laboratorii Donetskogo soveta narodnogo khozyaystva.

SAMOYLOV, V.; PAYEVSKIY, V.

Auditing collective farm income tax payments. Fin.SSSR 21  
no.5:81-85 My '60. (MIRA 13:7)  
(Collective farms)  
(Income tax--Auditing and inspection)

SAMOYLOV, V.; PAYEVSKIY, V.

Improve the economic work. Fin. SSSR. 22 no. 2:16-25 F '61.  
(MIRA 14:2)

(Finance)

ACC NR: AP6023055

(A)

SOURCE CODE: UR/0416/66/000/004/0085/0086

AUTHOR: Samoylov, V. (Major, Member of technical corps)

ORG: None

TITLE: Raised shelves and supports are used in fuel storage depots

SOURCE: Tyl i snabzheniye sovetskikh vooruzhennykh sil, no. 4, 1966, 85-86

TOPIC TAGS: fuel storage, storage facilities, fuel container / MR-fuel container

ABSTRACT: The arrangement of special shelves for storing empty pliable containers of the MR-type in various sizes is described. The containers, made of rubberized canvas, are used for transportation of liquid fuel under field conditions. Due to their heavy weight (up to 204 kg), it was decided that each pliable container be spread separately on a boxlike shelf 40 cm high. Then, the shelves are piled together forming a storage stack, as shown in a photo. The construction of boxlike shelves, their handling and assembling in stacks are described including the use of electric lift trucks. The height of a stack composed of ten shelves is 4 meters. Similar supports are also used for storage of various barrels and small tanks filled with petroleum products. Their use facilitates storing, handling and loading operations. Orig. art. has: 1 photo.

SUB CODE: 13// SUBM DATE: None

Card 1/1

SOROKIN, Valentin Alekseyevich; SKVIRSKIY, Lev Grigor'yevich; KARATSEVA  
Izetkhan Kaziyeвна; SAMOYLOV, V., otv. red.; SHATROVA, T., red.  
izd-va; TELEGINA, T., tekhn. red.

[Organization of auditing work on government revenue]Organiza-  
tsiia revizionnoi raboty po gosudarstvennym dokhodam. Moskva,  
Gosfinizdat, 1962. 219 p. (MIRA 16:3)

(Revenue--Auditing and inspection)

SAMOYLOV, V. A.

Vibration of Electric Power Station Units and Rotor Balancing (Vibratsiya agregatov elektrostantsii i balansirovka rotorov), edited by O. N. Davidovskiy, Gosenergoizdat, 1949, 160 pp.



*SAMOYLOV, V. A.*

NIKULIN, G.F.; SAMOYLOV, V.A.

Shortcomings in norms of electric power consumption. Prom.energ.  
12 no.10:18-20 0 '57. (MIRA 10:10)

1. Zavod "Serp i molot" (for Nikulin). 2. Energostyt Mosenergo  
(for Samoylov).

(Electric power)

PRESNYAKOV, A.A. (Alma-Ata); STARIKOVA, G.V. (Alma-Ata); SAMOYLOV, V. A.  
(Alma-Ata); CHERVYAKOVA, V.V. (Alma-Ata)

Superplasticity of cast metastable eutectics. Izv. AN. SSSR. Otd.  
tekh. nauk. Met. i topl. no.2:146-147 Mr-Apr '61. (MIRA 14:4)

1. Institut yadernoy fiziki AN KazSSR.  
(Nonferrous alloys--Metallography) (Eutectics)

PRESNIAKOV, A.A.; DAUTOVA, L.I.; SAMOYLOV, V.A.; AITKHOZHIN, E.S.

Causes of structural anomalies and the properties of zinc.  
Trudy Inst. met. i obog. AN Kazakh. SSR 7:3-18 '63.

(MIRA 17:6)

AYTKHOZHIN, E.S.; SAMOYLOV, V.A.

Rheotropic recovery in zinc. Trudy Inst. met. i obog. AN Kazakh.  
SSR 7:19-23 '63. (MIRA 17:6)

SAMOYLOV, V.A.

Anamolies of magnesium properties. Trudy Inst. met. i obog. AN  
Kazakh. SSR 7:38-42 '63. (MIRA 17:6)

PRESNYAKOV, A.A.; SAMOYLOV, V.A.; AITKHOZHIN, E.S.

Structural transformations in  $\beta$ -brass. Fiz. met. i metalloved.  
20 no.1:142-143 JI '65. (MIRA 18:11)

1. Institut metallurgii i obogashcheniya AN KazSSR.

SAMOYLOV, V.A.; PRESNYAKOV, A.A.

Investigating the effect of the rate of deformation on the  
plasticity of zinc and  $\beta$ -brass. Fiz. met. i metalloved. 20  
no.4:630-632 O '65. (MIRA 18:11)

1. Institut metallurgii i obogashcheniya, g. Alma-Ata.

L 44806-65 EWT(m)/EWP(w)/EWA(d)/EPR/T/EWP(t)/EWP(k)/EWP(z)/EWP(b)/EWA(c) PF-4/  
 Pad/PS-4 IJP(o) JD/NW S/ 46  
 ACCESSION NR AM4046713 BOOK EXPLOITATION B+1

Presnyakov, Aleksandr Aleksandrovich; Samoylov, Vladimir Anatol'evich;  
Chervyakova, Valeriya Venediktovna

Plasticity of commercial alloys; reference materials (Plastichnost' tekhnicheskikh splavov; spravochnyye materialy), Alma-Ata, Izd-vo AN KazSSR, 1964, 216 p. illus., biblio. 2,000 copies printed. (At head of title: Akademiya nauk Kazakhskoy SSR. Institut metallurgii i obogashcheniya)

TOPIC TAGS: pressure working, iron alloy, copper alloy, aluminum alloy, zinc alloy, nickel alloy, magnesium alloy, titanium alloy, tin alloy, brass, bronze, lead alloy

PURPOSE AND COVERAGE: This manual contains systematized data on the plasticity of the most widely used commercial alloys based on iron, copper, aluminum, zinc, and other metals. It presents materials on the basic feature of workability in relation to temperature, composition, and phase of the alloys. The manual also contains the information necessary to develop more rational processes of metal pressure working and is intended as a practical guide for plant engineers. The book will also be useful for researchers and students who specialized in this area.

Card 1/2



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ACCESSION NR AM4046713

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SUB CODE: MM

SUBMITTED: 03Jan64

NR REF SOV: 075

OTHER: 021

DATE ACQ: 25Jun64

Card <sup>ce</sup> 2/2

L 26085-65 EWT(m)/EMP(w)/EWA(d)/EPR/T/EMP(t)/EMP(b) Ps-4 IJP(c) JD

ACCESSION NR: AT5001280

8/2817/64/010/000/0072/0074

AUTHOR: Samoylov, V. A.

TITLE: Nature of the transition of cold-short metals from the brittle to the ductile state

SOURCE: AN KazSSR, Institut metallurgii i obogashcheniya. Trudy, v. 10, 1964. Metallovedeniye i obrabotka metallov davleniyem (Metallography and metal working by pressure), no. 3, 72-74

TOPIC TAGS: cold-short metal, brittle metal, ductile metal, zinc, magnesium, cold brittleness, x-ray structure analysis, metal lattice

ABSTRACT: Mg and Zn were subjected to tensile strength tests and x-ray structural analysis at temperatures up to 300C in order to establish the purely physical cause of low-temperature brittleness. During transition of the metal from the brittle into the ductile state, there is a preliminary period, during which there is a gradual accumulation of certain changes in the lattice, which then lead to its qualitative rearrangement. This rearrangement is apparently connected with a change in the forces between the atoms. The rearrangement causes a considerable dispersion of the ductility and strength indices and also an increase in the intensity of the diffusion scattering. A rise in the ductility and strength

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L 26085-65

ACCESSION NR: AT5001280

indices and a drop in the background intensity during the change from the brittle into the ductile state indicates fuller completion of the transition process at higher temperatures. Orig. art. has: 4 figures.

ASSOCIATION: Institut metallurgii i obogashcheniya, Akademii nauk Kazakhskoy SSR (Metallurgy and concentration institute, Academy of sciences, Kazakh SSR)

SUBMITTED: 00

ENCL: 00

SUB CODE: 144

NO REF SOV: 003

OTHER: 002

Card 2/2

L 6894465 EWT(m)/EPR/EWP(q)/EWP(b) Ps-L AFWT/SSD/RAEM(t) MJW/JD

ACCESSION NR: AR4044225

S/0137/64/000/006/1055/1055

SOURCE: Ref. zh. Metallurgiya, Abs. 61320

53

AUTHOR: Samoylov, V. A.

TITLE: The nature of the transition of cold-short metals from the brittle to the plastic state

CITED SOURCE: Tr. In-ta metallurgii i obogashcheniya. AN KazSSR, v. 10, 1964, 72-74

TOPIC TAGS: cold short metal, brittleness, plasticity, x ray investigation, brittle state, plastic state

TRANSLATION: There is determined the change of  $\psi$ ,  $\sigma_b$  and intensity of the background of x-ray photographs for brand MG-1 magnesium and brand TsO zinc in the interval of 20-300°. A tensile test was conducted on homogenized samples. In the interval 175-275° for Mg there is revealed a zone of scattering, in which there is simultaneously observed both brittle and also plastic fracture of the samples. In the same interval, individual samples exhibited lower values of  $\sigma_b$ , i.e., there is

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ACCESSION NR: AR4044225

also increased scatter of the values of  $\sigma$ . At temperatures  $>275^\circ$ ,  $\gamma$  increases. For Zn the zone of scattering is expressed less sharply and lies in a narrower temperature interval ( $35-125^\circ$ ). In this region for Zn there is observed an increase of  $\sigma$ . X-ray investigation was conducted for powder samples which after manufacture were held at  $150^\circ$  for 24 hours and then slowly cooled to room temperature. For Mg the intensity was determined for line (114); for Zn - for line (121). In the region of transition of Mg and Zn from the brittle to plastic state there is observed a sharp increase in intensity. Up to this region there occurs a decrease of intensity with increasing temperature. It is possible to assume that during the transition of metals from the brittle to plastic state there is a preparatory period, during which there occurs a gradual quantitative accumulation of certain changes in the lattice which then leads to its qualitative rearrangement.

SUB CODE: MM, SS

ENCL: 00

Card 2/2

L 55849-65	EWI(m)/EWP(w)/EWA(d)/T/EWP(t)/EWP(b)	IJP(c)	JD
ACCESSION NR: AF5013125	UR/0370/65/000/002/0190/0192 669.75		
AUTHOR: <u>Samoylov, V. A. (Alma-Ata); Presnyakov, A. A. (Alma-Ata)</u> 19 B			
TITLE: On the properties of <u>antimony</u> at elevated temperatures			
SOURCE: AN SSSR. Izvestiya. Metally, no. 2, 1965, 190-192			
TOPIC TAGS: antimony, metal <u>mechanical property</u> 4 6			
ABSTRACT: Mechanical properties, i.e., <u>fracture strength</u> , hot hardness, elongation and reduction in area of cast button head specimens were studied as a function of strain rate and temperature. Four rates of elongation were tested: .02, 0.1, 1.3, 8 mm/sec. Increasing elongation rate was found to have no effect on the fracture strength while ductility (true elongation) strongly increased. Ductile to brittle transition temperature increased from 340-550°C. Commercial purity antimony exhibited brittle fracture at all temperatures and this is attributed to the existence of both a less equiaxed grain size and the visual presence of foreign precipitates in its grain boundaries. Lattice parameter measurements showed a change in the coefficient of thermal expansion occurring at 400°C, this change said to be brought			
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L 55849-65

ACCESSION NR: AP5013125

about by the same change in interatomic forces that leads to the increased plasticity. Increased temperature leads to increased unit cell size and in the 400°C region a large increase in background radiation on the x-ray film is noticed. These effects are said to result from increased atom mobility. Orig. art. has: 4 figures.

ASSOCIATION: none

SUBMITTED: 02Mar64

ENCL: 00

SUB CODE: MM

NO REF SOV: 003

OTHER: 001

Card 2/2

SAMOYLOV, V.A.; PRESNYAKOV, A.A.

Properties of antimony at high temperatures. Trudy Inst. met. i obog.  
AN Kazakh. SSR 10:67-71 '64. (MIRA 18:7)



ACC NR: AP5028133

SOURCE CODE: UR/0048/65/029/011/2110/2112

AUTHOR: Artyukhovskaya, L.M.; Kremenichugskiy, L.S.; Mal'nev, A.P.; Samoylov, V.B.  
Yatsenko, A.P.

ORG: Institute of Physics, Academy of Sciences, UkrSSR (Institut fiziki Akademii nauk UkrSSR)

TITLE: Use of the pyroelectric effect of barium titanate ceramics to record low fluxes of thermal radiation. Report, Fourth All-Union Conference on Ferroelectricity held at Rostov-on-the-Don 12-18 September, 1964

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 29, no. 11, 1965, 2110-2112

TOPIC TAGS: pyroelectricity, pyroelectric detector, barium titanate, ceramic material, transducer, thermal radiation, heat flux pickup

ABSTRACT: A number of thin barium titanate ceramic wafers were produced and tested as pyroelectric detectors of minute, rapidly changing thermal fluxes. Details of the preparation of the detectors are not given. The sensitivity and the noise level were both inversely proportional to the frequency, and the minimum detectable power was nearly independent of frequency for frequencies up to 2 kc. The intrinsic noise of the pyroelectric detector exceeded the Johnson noise of the equivalent RC circuit by not more than 50%. The intrinsic noise of the detector decreased more rapidly with increasing frequency than did the noise level of the input circuit; in designing input circuits for use with pyroelectric detectors, therefore, it is desirable to take par-

Card 1/2

SOURCE CODE: UR/0120/66/000/006/0169/0171

ACC NR: AP7001958

AUTHOR: Kremenchugskiy, L. S.; Mal'nev, A. F.; Samoylov, V. B.  
ORG: Institute of Physics, AN UkrSSR (Institut fiziki AN UkrSSR)

TITLE: Large-area pyroelectric radiation detector

SOURCE: Priory i tekhnika eksperimenta, no. 6, 1966, 169-171

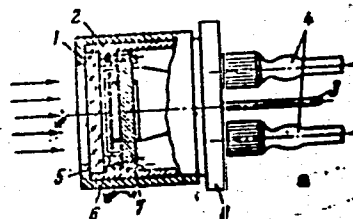
TOPIC TAGS: thermal radiation detector, thermoelectric phenomenon

ABSTRACT:

High-speed, large thermal radiation detectors with a high threshold sensitivity, a small time constant, and a relatively uniform zonal sensitivity are described.

An equivalent circuit and a cutaway view of such a detector are shown in Fig. 1. Thermoelectric current  $I$  is determined by the speed with which polarization of the crystal is changed under the effect of irradiation. Time constant  $\tau$  of the detectors does not exceed  $50 \mu\text{sec}$ . The mean-square value of the noise current is frequency

Fig. 1. Large thermal detector

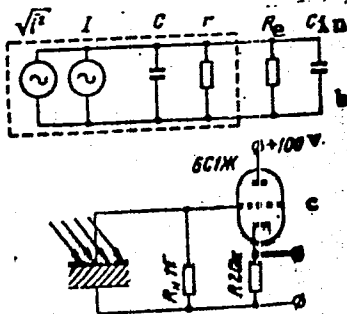


a) Structure of the detector:  
1 - Protective jacket; 2 - body;  
3 - vacuum inlet; 4 - output terminals;  
5 - KBr window; 6 - sensitive element;  
7 - support; 8 - lid.

UDC: 621.384.326.22:536

Card 1/3

ACC NR: AP7001958



b) Equivalent circuit of the detector:

$\sqrt{i^2}$  - noise current generator;  $I$  - thermoelectric current generator;  $C$  - crystal capacitance;  $r$  - equivalent loss resistance in the crystal;  $R_e$  - load resistance;  $C_{in}$  - input capacitance of the tube.

c) Circuit diagram of the detector.

independent over a wide range, and the S/N ratio of the detectors therefore remains practically constant at  $f < \tau^{-1}$  and constant radiation flux.

Sensitive elements of the detectors are made of crystals in the form of flat capacitors. Deposited layers ( $\sim 1000 \text{ \AA}$ ) of silver serve as the electrodes. To obtain a relatively uniform spectral characteristic of a detector in the near and central infrared regions of the spectrum, the electrodes are coated with black gold. The thickness of the crystals ( $100 \mu$ ) is uniform within  $\pm 3\%$ .

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ACC NR: AP7001958

The zonal sensitivity of detectors made of  $\text{BaTiO}_3$  single crystals and ceramics and triglycinsulfate crystals were investigated. Sensitive areas of the samples ranged in size from 80 to 100  $\text{mm}^2$ . Sensitivity distribution over these areas was measured by a light probe 0.15—1 mm in diameter. When measured with a 0.15-mm probe, sensitivity varied from its maximum value by up to 25% for ceramics and up to 75% for single crystals at isolated points.

These studies also showed that large detectors made of  $\text{BaTiO}_3$  ceramics exhibited the most uniform sensitivity (threshold sensitivity,  $5 \times 10^{-9}$  w/cps<sup>1/2</sup>). Thermoelectric detectors made of triglycinsulfate single crystals had a greater, although less uniform, sensitivity ( $2 \times 10^{-9}$  w/cps<sup>1/2</sup>).

It is noted that these thermal radiation detectors have significant advantages over other types when large-area sensitive elements are required. Orig. art. has: 3 figures. [FSB: v. 3, no. 2]

SUB CODE: 20 / SUBM DATE: 24Nov65 / ORIG REF: 004 / OTH REF: 003

Card 3/3

L 18944-63

ENT(1)/EWP(q)/ENT(m)/BDS

AFFTC/ASD/ESD-3/IJP(C)

Pad

GG/JD/HW

ACCESSION NR: AP3003318

S/0185/63/008/007/0762/0767

AUTHOR: Kremenchugs'ky'y, L. S.; Mal'nev, A. F.; Samoylov, V. B.

TITLE: Investigation of the temperature dependence of current noise of thin metal film

SOURCE: Ukrayins'ky'y fizy'chny'y zhurnal, v. 8, no. 7, 1963, 762-767

TOPIC TAGS: current noise, thin metal film, nickel, gold, liquid nitrogen temperature, metal film

ABSTRACT: The authors give the electrical diagram of the setup they developed and describe the procedure they used in their investigation of current noises of thin metallic films. They investigated nickel and gold films at a temperature range of 77 to 400 K. The temperature dependence of current noise was established. When temperature was decreased from room temperature to that of liquid nitrogen the mean square of the current noise was reduced by 100. This may not be explained by a decrease in the film resistance during cooling. An empirical equation was developed showing the change in current noise taking place in thin metallic films over a wide range of temperatures. "The authors are grateful to comrades B. N. Ber'ozko and L. N. Shats for their help in adjusting and preparing the installation." Orig. art.

Card 1/8

L 18944-63

ACCESSION NR: AP3003818

has 4 figures and 4 formulas.

ASSOCIATION: Instytut fizyky AN URSR, Kiev (Physics Institute of the Academy of Sciences, UkrSSR, in Kiev)

SUBMITTED: 19Dec62

DATE ACQ: 08Aug63

ENCL: 04

SUB CODE: PH

NO REF SOV: 002

OTHER: 001

Card 2/02

SAMOYLOV, V.D.; SIBILEV, A.A.

Nanosecond-range double-pulse generator. Nauch.-tekhn.sbor.Gos.izd.-va  
lit. v obl. atom. nauki i tekhn. no.4:117-120 '62. (MIRA 16:10)

L 20006-65 EWT(1)/EWA(h) Feb

ACCESSION NR: AR4044803

S/0271/64/000/006/A054/A055

SOURCE: Ref. zh. Avtomatika, telemekhanika i vychislitel'naya tekhnika.  
Svobody tom, Abs. 6A308

AUTHOR: Samoylov, V. D.; Skerskiy, K.K.

TITLE: Decimal code --- digit converter

CITED SOURCE: Sb. kibernetika. Kiyev, Gostekhizdat USSR, 1963, 120-123

TOPIC TAGS: luminous digit display, decimal code

TRANSLATION: A contactless circuit for controlling a luminous digit display by means of a potential-type or pulse parallel decimal code is considered. The control circuit for one character comprises nine P-25 transistor oscillators, a diode matrix, and memory capacitors. In controlling the potential code, the oscillators receiving -1.5 v are turned on, and the oscillators receiving +1.5 v are turned off. Along with the turned-off oscillators, neon lamps in the display go off, while the remaining groups form a contour of the digit in question. In the pulse-code system, prior to the pulse arrival, all oscillators operate.

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L 20006-65

ACCESSION NR: AR4044803

A negative pulse arriving at the matrix input discharges the memory capacitor, which brings about collapse of generation in a corresponding oscillator. After the pulse, the oscillation is not restored as the transistors have a positive bias of +6 v. However, this bias cannot cause the oscillator collapse because it is compensated by the voltage of the memory capacitor charged from this oscillator. The frequency of the incoming pulses is 10 kc. Replacing a digit on the display is effected by applying a positive pulse to the transistor connected in the bias circuit of all oscillators, which results in turning off the bias source. The above system was in practical operation, without readjustment, for 5 months, 8 hours a day. Supply voltage variation within  $\pm 10$  -20% did not cause instability of operation. Bibliography: 3 titles.

SUB CODE: DP, EC

ENCL: 00

Card 2/2

BELIMA, A.S.; SAMOYLOV, V.D.

Computer for converting analog binary code to a parallel  
binary-decimal code. Avtom. i prib. no.2:37-39 Ap-Je '63.  
(MIRA 18:8)

1. Institut avtomatiki Gosplana UkrSSR.

L 6438-66 EWT(1)/EWA(h)

ACC NR: AR5014358

SOURCE CODE: UR/0271/65/000/005/B017/B017

SOURCE: Ref. zh. Avtomatika, telemekhanika i vychislitel'naya tekhnika.  
Svodnyy tom, Abs. 5B123

AUTHOR: Samoylov, V. D.

TITLE: Device for multiplication and division of constant voltages

CITED SOURCE: Sb. Ustroystva i elementy prom. telemekhan. Kiyev, 1964, 101-105

TOPIC TAGS: voltage multiplication, voltage division, function generator

TRANSLATION: A circuit is considered for multiplication and division suitable for solving this equation

$$\tau = \frac{U_1 U_2}{U_3 U_4} \quad (1),$$

where  $U_1, U_2, U_3, U_4$  are the input voltages of the same polarity and  $\tau$  is the output-voltage pulse duration. The circuit is based on a well-known method of conversion of the ratio of two constant voltages into a time duration, the conversion being carried out by a two-stage integration. A magnetic element made of

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UDC: 681.142.642.3/4

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L 6438-66

ACC NR: AR5014358

a square-loop material is used as an integrator. In the first integration stage, the magnetic element is reversed by an input voltage, the magnetic-flux change being  $\Delta\Phi = U_1 \tau_1$ . In the second stage, the magnetic element is changed into its zero stage by a  $U_2$  pulse; the duration of this pulse represents the quotient. A block diagram of the device realizing the formula (1) is presented, as well as

a diagram for realization of the following formula 
$$\tau_1 = \frac{U_1 U_2 U_3 \dots U_n}{U_1 U_2 U_3 \dots U_{n+1}}.$$

The error of reproducing the function is 0.8%. IM-2 and VT-5 ferrites of 7- and 10-mm diameter respectively were used as magnetic elements. Figs. 2.

SUB CODE: DP

nw

Card 2/2

SAMOYLOV, V. F. Cand. Geolog-Mineral Sci.

Dissertation: "Investigation of Fireclays of Krasnogorsk Deposits (Geological Structure, Composition and Properties)." All-Union Sci Res. Inst. of Mineral Raw Materials. 9 Jul 47.

SO: Vechernyaya Moskva, Jul, 1947 (Project #17836)

AUTHOR: ~~Samoylov, V. F.~~ Candidate of Geological- SOV/30-53-6-8/45  
-Mineralogical Sciences

TITLE: Economics and Geology (Ekonomika i geologiya)

PERIODICAL: Vestnik Akademii nauk SSSR, 1958, Nr 6,  
pp. 62 - 66 (USSR)

ABSTRACT: At present there is no scientific institution in the USSR carrying out investigations in the field of economic geology, which signifies a backwardness in comparison to foreign countries. The determination of the most rational and complex methods of utilization of the mineral resources of the USSR must be considered the most important task of such investigations. These investigations must be carried out on the basis of the study and the generalization of both Soviet and foreign scientific data and experience. A great backwardness is found in the field of gas-production and gas utilization in the national economy of the USSR. The exploitation of solid fuel and of many ore and other sites is wasteful. Many a "barren rock", as well as waste products can serve as initial raw materials for the obtaining of useful products in the near future. The evidence and analysis of the min-

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2

Economics and Geology

SOV/30-59-6-8/45

eral resources must comprise the whole process of investigation of collecting sites, their exploitation, enrichment and processing. There is no scientific institution in the USSR carrying out a systematic and universal analysis (economical, technical and technological) of the mineral raw material basis as a whole in this country, as well as on individual industrial branches, economical rayons and great industrial complexes in order to determine the safe supply of the enterprises with the necessary raw materials. Problems of the geographical distribution of the raw material bases also await solution, as well as the problem of the estimation of the efficiency of geological prospecting. Up till now, the scientific foundations of the economical estimation of the sites of natural resources have not been worked out. At the end of 1955, a great group of scientists and specialists submitted a proposal in view of carrying out investigations in this line within the AS USSR. The considerations on this topical subject which took place in the years from 1956 to 1957 showed that a complicated and voluminous work is concerned here, which cannot be successfully carried out without essential economic investigations. Moreover, it is found of importance that the USSR at present does not carry out sufficient investigations on the world-sources of mineral resources.

Card 2/3

2

27891  
S/048/61/025/010/001/003  
B104/B112

21.6000  
AUTHORS:

Zubritskiy, L. A., Popov, A. I., Sorokin, P. V., and  
Samoylov, V. F.

TITLE:

Semiconductor spectrometers of charged particles

PERIODICAL:

Akademiya nauk SSSR. Izvestiya.  
v. 25, no. 10, 1961, 1286 - 1290

Seriya fizicheskaya,

TEXT: The authors constructed a series of germanium and silicon spectrometers. They investigated the properties of these spectrometers by means of  $\alpha$ -particle radiation from a  $Po^{210}$  source. The voltage pulses obtained from the detector were amplified by a linear amplifier and analyzed by means of a 100-channel pulse analyzer of AM-100 (AI-100) type. In germanium spectrometers, n-type germanium with a resistivity of 40-45 ohm.cm is used. A surface-barrier p-n junction was produced by sputtering gold on the germanium surface. The germanium plates (5.5x1 mm) were etched in an CP-4 (SR-4) solution to obtain a regular reflecting surface. The crystal was mounted in a crystal-holder. A small amount

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27891  
S/048/61/025/010/001/003  
B104/B112

## Semiconductor spectrometers...

of indium soldered to the upper surface of the crystal produced a p-n junction. The construction is shown in Fig.1. The spectrometer was investigated at nitrogen temperature. The volt-ampere characteristic of the gold-germanium spectrometer described here is better than that of the spectrometer described by M. L. Halbert and J. L. Blankenship (Nucl. Instr. and Method., 8, 106 (1960)). If the voltage on the junction is between 10 and 30 v the resolving power of the spectrometer is  $< 0.5\%$ . In silicon spectrometers, n-type silicon with a resistivity of 100 ohm·cm is used. By sputtering boron on silicon plates ( $4.4 \times 1$  mm,  $1200^\circ\text{C}$ , diffusion depth of boron  $\lesssim 1\mu$ ) a p-n junction is produced. After finishing the diffusion process the p-layer is etched. The crystal is fixed in a tantalum crystal holder. An aluminum contact is soldered to the p-layer. The construction of the silicon instrument is the same as that of the germanium instrument. The silicon spectrometer was investigated at room temperature and nitrogen temperature. At room temperature the resolving power of the spectrometer is  $3\%$  (if the voltage on the junction is between 5 and 10 v). At nitrogen temperature, the resolving power of the silicon spectrometer is  $2.5\%$  (voltage on the junction between 50 and 180 v). Up to a voltage of 200 v, the current

Card 2/4

VARBANSKIY, Aleksandr Mikhaylovich; SAMOYLOV, V.F., retsenzent;  
KRIVOSHEYEV, M.I., red.

[Television technology] Televizionnaya tekhnika. Izd.2.,  
perer. i dop. Moskva, Izd-vo "Energia," 1964. 543 p.  
(MIRA 17:6)



SAMOYLOV, V. F., Engineer

Cand Tech Sci

Dissertation: "Theory and Calculation of the Single-Tube Generators of  
Saw-Like Electric Impulses for Television Receiver."

12/10/50

Moscow Electrical Engineering Inst of Communication

SO Vecheryaya Moskva  
Sum 71

SAMOYLOV, V.

Rectifier for feeding a "TUB-100" amplifier. Radio no.8:26-27  
Ag '54. (MIRA 7:8)

1. Inzhener Nizhne-Amurskoy direktsii radiotranslyatsionnoy  
seti.  
(Radio--Rectifiers)

SAMOYLOV, Vladimir Fedorovich; KRIVOSHEYNV, M.I., redaktor; VERKHOVINA,  
T.M., redaktor; SOKOLOVA, R.Ya., tekhnicheskii redaktor

[Statistical characteristics of television signals and requirements for capacity channels] Statisticheskie svoistva televisionnogo signala i trebovaniya k propusknoi sposobnosti kanala. Moskva, Gos.izd-vo lit-ry po voprosam svyazi i radio, 1955. 39 p.  
(Television) (MIRA 9:3)

SAMOYLOV, V.F.

CARD 1 / 2

PA - 1302

SUBJECT  
AUTHOR  
TITLE

USSR / PHYSICS

SAMOYLOV, V.F., RODIONOV, V.M.

On a Possible Method of Improving the Accuracy of a Television Picture.

PERIODICAL

Radiotekhnika, 11, fasc. 4, 44-48 (1956)

Issued: 5 / 1956 reviewed: 9 / 1956

The distinctness of the image is determined by the transmission capacity of the "fronts" of a television signal (sharp transition from bright to dark and vice versa) and by the capacity of reproducing fine details. A decrease of sharpness is connected with the finite diameter of an electron beam in reception- and transmitter tubes.

The device described in this case only increases the contrast of the fine details, it does, however, not exercise any influence upon the front of the television signal; it does not react to the steepness of the front of the impulses, but on the duration of these impulses. The "contrastor" for fine details must satisfy the following demands: 1.) Differentiation of the television signal for the purpose of determining its derivative. 2.) Shift of the signal of the derivative by the time approximately necessary for the transmission of the element of a picture. 3.) Comparison of the signs of the shifted and of the not shifted signal of the derivative. 4.) If signs differ the contrasts of the television signal must increase. In all other cases (++,--,0+,+0,-0,0-,00) the television signal must pass unchanged through the contrastor. By way of an explanation of what has just been said the trans-

Radiotekhnika, 11, fasc.4, 44-48 (1956)

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formation of a television signal (fine detail and front) is studied as an example.

A drawing illustrates the simplified block scheme of the device which satisfies these conditions. On this occasion the television signal is differentiated and, after suitable amplification, transferred to the inputs of two uniform shift lines with tuned load. The circuit of this device is arranged for the separate regulation and control of all three components, i.e. of the main video signal, as well as of the "white" and "black" contrasting impulses. The here discussed variety of the block scheme is not the only one, for the order of differentiation and separation as to time of the "video signal" is not of essential importance. The variety with separation as to time of the signal after differentiation is more simple and more economical.

The television signal is differentiated in the contraster by means of an amplification cascade with pentode switched on to inductive load. A bilateral limiter with germanium diodes should be switched on to the channel for the amplification of the differentiated signal. The main video signal and the contrasting impulses are superimposed by means of cascades which are switched on to a common load resistance.

INSTITUTION:



SAMOILOV, V.F., kandiadt tekhnicheskikh nauk, dotsent.

"Principles of color and three-dimensional television". P.V.Shmakev.

Reviewed by V.F.Samoilov. Vest.svyazi 16 no.2:29 P. 456. (MIRA 9:7)

1. Moskovskiy elektrotekhnicheskiy institut svyazi.  
(Color television) (Shmakev, P.V.)

IGNAT'YEV, Nikolay Konstantinovich; NOVIKOVA, Ye.S., red.; SAMOYLOV, V.F.,  
otv.red.; KARABILOVA, S.F., tekhn.red.

[Television] Televidenie. Izd. 2-e, perer. Moskva, Gos. izd-vo  
lit-ry po voprosam svyazi i radio, 1958. 231 p. (MIRA 12:2)  
(Television)

KRIVOSHEYEV, Mark Iosifovich; SAMOYLOV, V.F., otv.red.; BASHCHUK, V.I.,  
red.; KARABILOVA, S.F., tekhn.red.

[Evaluation and measurement of fluctuating interferences in  
television] Otsenka i izmerenie fluktuatsionnykh pomekh v tele-  
videnii. Moskva, Gos.izd-vo lit-ry po voprosam svyazi i radio,  
1960. 78 p. (MIRA 13:10)

(Television--Interference)

BYALIK, Gavriil Iosifovich; SAMOYLOV, V.F., red.; ASANOV, P.M., tekhn.red.

[Color television] Tsvetnoe televidenie. Moskva, Gos.energ.izd-vo,  
1960. 126 p. (Massovaya radiobibliotek, no.358).

(MIRA 13:5)

(Color television)

SAMOYLOV, Vladimir Fedorovich; LYUDMIRSKIY, I.I., retsenzent; BREYTBART,  
A.Ya., otv.red.; BASHCHUK, V.I., red.; SHEFER, G.I., tekhn.red.

[Saw-tooth wave generators in television; theory and calculation  
principles] Generatory пилообразного тока в телевизоре; основы  
теории и расчета. Москва, Gos.izd-vo lit-ry po voprosam svyazi  
i radio, 1960. 154 p. (MIRA 13:11)  
(Oscillators, Electric) (Television)

SAMOYLOV, Vladimir Fedorovich; YAKOBSON, A.Kh., red.; BORUNOV, N.I.,  
tekhn.red.

[Synchronization of television sweep generators] Sinkhronizatsiia  
generatorov televizionnoi razvertki. Gos.energ.izd-vo, 1961.  
95 p. (Massovaia radiobiblioteka, no.395) (MIRA 14:6)  
(Television--Receivers and reception)

SAMOYLOV, Vladimir Fedorovich; LOPATIN, K.G., red.; YEMZHIN, V.V.,  
tekh. red.

[Large television screens] Bol'shoi televizionnyi ekran. Moskva, Gosenergoizdat, 1962. 63 p. (Massovaia radiobiblioteka, no.437) (MIRA 15:9)  
(Television—Receivers and reception)

SAMOYLOV, Vladimir Fedorovich; LOPATIN, K.G., red.; BUL'DYAYEV,  
~~N.A., L.S.M. Fed.~~

[Qualitative indices of a television image] Kachestvennye  
pokazateli televizionnogo izobrazhenia Moskva, Gosenergo-  
izdat, 1963. 54 p. (Massovaya radiobiblioteka, no.475)  
(MIRA 16:9)

(Television--Receivers and reception)



SHUMIKHIN, Yuriy Artem'yevich; SAVOYLOV, V.F., red.

[Automatic television systems] Televizionnye avtomaty.  
Moskva, Energiia, 1964. 46 p. (Massovaya radiobiblioteka,  
no.537) (MIRA 17:8)

SAMOYLOV, Vladimir Fedorovich; MAKOVEYEV, Vladimir Grigor'yevich;  
FUFAYEVA, M.N., red.

[Pulse techniques] Impul'snaia tekhnika. Moskva, Izd-vo  
"Sviaz'" 1964. 279 p. (MIRA 17:5)

IKONNIKOV, V.V., prof.; VASIL'YEV, P.G., ,and, ekon.nauk; LAVROV, V.V., prof.; RYUMIN, S.M.; KOLYCHEV, L.I., kand. ekon. nauk; SAMOYLOV, V.K.; LYSKOVICH, A.A.; KOLOMIN, Ye.V., kand. ekon. nauk; MITEL'MAN, Ye.L., kand. ekon. nauk; BEL'KINA, R.K., kand. ekon. nauk; SHTEYNHLEYGER, S.B., kand. ekon. nauk; ROTLEYDER, A.Ya., kand. ekon. nauk; POGODIN, Yu., red.; TELEGINA, T., tekhn. red.

[Finance and credit in the U.S.S.R.] Finansy i kredit SSSR.  
Moskva, Izd-vo "Finansy," 1964. 447 p. (MIRA 17:3)

GARB, Moisey Gesseleyevich; SIGALOV, Viktor Mayorovich; SAMOYLOV,  
V.F., otv. red.; VEYTSMAN, G.I., red.

[Synchronization in television engineering] Sinkhroniza-  
tsiia v televizionnoi tekhnike. Moskva, Izd-vo "Sviaz',"  
1964. 214 p. (MIRA 17:11)

ACC NR: AM5001713

Monograph

UR/

Samoylov, Vladimir Fedorovich; Makoveyev, Vladimir Grigor'yevich

Pulse technology<sup>1</sup> (Impul'snaya tekhnika) [Moscow] Izd-vo "Svyaz'", 1964. 279 p. illus., biblio. Errata slip inserted. 27,000 copies printed.

TOPIC TAGS: pulse signal, pulse amplifier, pulse modulation, pulse generator, pulse transformer, pulse shaper, multivibrator, trigger circuit

PURPOSE AND COVERAGE: This book is recommended as a manual for students in technical schools of communication. It presents the fundamentals of pulse technology and the essentials of appropriate theories and calculations.

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6. Pulse frequency multipliers -- 265
7. Multipliers with inert synchronization -- 275

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SUB CODE: 09/ SUBM DATE: 23Mar64/ ORIG REF: 017/ OTH REF: 001/

Card 4/4



1ST AND 2ND CATEGORIES		PROCESS AND PROPERTIES INDEX		2	
<p>CA SAMOYLOV, V. G.</p>		<p>The problem of negative catalysis. V. G. Samoilov (Moscow State Univ.). <i>Vestnik Moshch. Univ.</i> 1943, No. 1, 105-9.—Soln. of Fe and steel in <math>H_2SO_4</math> and <math>HCl</math> (5-25%) is inhibited by heterocyclic compds. contg. N and by alkaloids, e.g., pyridine, quinoline, acridine, guanine, nicotinic, betaine, caffeine. With 0.3-0.6 g. of inhibitor in 100 ml. acid, in the presence of KI (20-50 mg./100 ml.), gas evolution stopped after 3-6 hrs.; without KI, after 12-14 hrs.; and the metal remained passive towards the inhibited soln. for 6 months. With the metal heated to 200-700° prior to immersion, passivation occurred within 30 min.; in 10% <math>HCl</math>, total loss of wt. (due to soln. prior to passivation) was 9-11 g./sq. m. Passivated Fe and steel, fractionated in unacidified acid, did not dissolve for several days. Red heat removes the passivity. Heterocyclic compds. not contg. N (e.g., furan, fural, thiophene, etc.) and amino acids have no passivating effect. Certain aq. plant exts. (potato and tomato leaves, wormwood, tea, ferns, datura, hemlock, hellebore root, tobacco, cinchona bark, peat) had an inhibiting effect of the same order as pure alkaloids. The scraped-off surface layer of the passivated Fe was shown to contain N by the micro-Dumas method, with a neg. result on nonpassivated Fe. Evidently N from the inhibitor is incorporated permanently into the passive film. N. Then</p>			
<p>ASR-ELA METALLURGICAL LITERATURE CLASSIFICATION</p>		<p>SEARCHED INDEXED</p>			
<p>SEARCHED INDEXED</p>		<p>SEARCHED INDEXED</p>			

SAMOYLOV, V. G.

Cand Geolog - Mineral Sci

Dissertation: "Waterproofing and Strengthening Dispersed Grounds by Introduction of Portland Cement." 15/6/50

Moscow Order of Lenin State V imeni M. V. Lomonosov.

56 Vecheryaya Moskva

Sum 71

CA

Changes in the physicochemical properties of soils under the influence of the products of hydrolysis of portland cement. V. G. Sumolov (Moscow State Univ.). *Vestnik Moskov. Univ.* 5, No. 6, Ser. Fiz.-Mat. i Estest. Nauk No. 4, 79-82(1959).—Air-dried samples (100, 200, or 300 g.) of typical soils from the northern and southern zones of the Soviet Union were mixed with various amts. of portland cement and water, made into 25 X 25-mm. cylinders under load of 30 kg./sq. cm., kept for 7 days in a moist atm., then for 7 days in air-dry atm., and finally subjected to various tests. The properties of the soils changed with the addn. of over 6% cement. Greatest water resistance, strength of water-satd. cylinders, and frost resistance, which were shown by samples of over 15% cement, were dependent upon chem.-mineralogical compn. of the soils. Mixes from carbonate soils possessed greater water resistance, strength in water-satd. condition, and frost resistance than noncarbonate soils, if these soils do not contain a large amt. of minerals of montmorillonite. Soils which are poor in Ca and are capable of absorbing a large amt. of Ca from the hydrolysis products of the cement reduce the binding prop-

erties of the hydrolysis products. The presence of carbonate salts in the soil, with the admixt. of a small amt. of other salts, is not a harmful factor in making products of growing strength. H ions and also active silicon and aluminum, which are found in soils in the soil, reduced the binding properties of the hydrolysis products and hinder the processes of crystn. and hardening of new formations during the first periods of hardening. If clayey soils contain a large amt. of minerals of the montmorillonite groups (as in bentonite clay), which increase their vol. upon swelling, the resulting mixes will be neither water-resistant nor frost-resistant. Mixes from soils in which kaolinite predominates have a low frost resistance but good water resistance and strength in water-satd. condition. The force of irreversible adhesion and tenacity of new formations in the mixes is not the same but depends not only upon the quality and quantity of the hydrolysis products but, to a considerable extent, also upon the chem.-mineralogical compn. of the grain fractions of the soils. The compressive strength after a one-month water satn., particularly when the cement content was 15-24%, was about the same as for concretes (93-180 kg./sq. cm. for carbonate soils and 16-80 kg./sq. cm. for noncarbonate soils). This makes it possible to utilize such mixes for highway foundations. B. Z. Kamsh

SAMOLLOV, V. G.

Chemical Abst.  
Vol. 48 No. 8  
Apr. 25, 1954  
Cement, Concrete, and Other  
Building Materials

①  
Retardation of the increase in mechanical strength of soil-cement mixtures. V. G. Samollov. *Vestnik Moskov. Univ.* 6, No. 8, Ser. Fiz.-Mat. i Estestven. Nauk, No. 8, 131-6(1951). Soils high in carbonate, and slightly alk., do not affect the normal setting and hardening of the portland cement; acid soils, free from carbonates, seriously retard these processes. The retardation effects, however, systematically diminish with increasing age of the mortars. The retardation is attributed to the presence of highly dispersed, highly active adsorbents for  $\text{Ca(OH)}_2$ . Especially, the high content of chernozem in humic material is responsible for the strong adsorption and reduction in strength. To overcome these troubles in soil-cement mortar, it is recommended to add 0.5-1.5 weight % of  $\text{Na}_2\text{CO}_3$ ,  $\text{CaCl}_2$ , and  $\text{Ca(OH)}_2$ . W. Eitel

SAMOYLOV, V. G.

Water Supply

Struggling against filtration from water basins of central black-earth provinces. Gidr.i mel. 4 no. 3, 1952.

Monthly List of Russian Accessions, Library of Congress,  
June, 1952. UNCLASSIFIED.

FD-1513

USSR/Geophysics - Water Conservation

Card 1/1 : Pub. 129-16/18

Author : Samoylov, V. G.

Title : Main causes for increased losses of water from ponds and reservoirs, and measures against them.

Periodical : Vest. Mosk. un., Ser. fizikomat, 1 yest. nauk, 9, No 6, 129-137, Sep 54

Abstract : The author describes an investigation into the causes for the increased arid and semi-arid losses of water from ponds and reservoirs in the Central Black Earth Region during 1950, 1951, 1952, and 1954, and also studies the data of geological investigations into local water economy following the large-scale construction of ponds and reservoirs in arid regions started in 1948. It was found that in many cases these ponds and reservoirs turned out to be waterless, especially in the Central Black Earth Region.

Institution : Chair of Ground Science

Submitted : May 19, 1954

112-57-7-14226

Translation from: Referativnyy zhurnal, Elektrotekhnika, 1957, Nr 7, p 66 (USSR)

AUTHOR: Samoylov, V. G., and Mamina, S. Ye.

TITLE: Experience With Preventing Water Seepage From Reservoirs  
(Opyt bor'by s fil'tratsiyey vody iz vodoyemov)

PERIODICAL: Byul. Mosk. o-va ispyt. prirody. Otd. geol. (Bulletin of the  
Moscow Society of Nature Explorers. Geology Division), 1956, Vol 31, Nr 4,  
pp 65-76

ABSTRACT: Bibliographic entry.

Card 1/1

SAMOYLOV, V.G.

SAMOYLOV, V.G.

Ground in the northwestern section of the central Chernozem  
region within the limits of Orlov Province and possibilities  
of using it for reservoir construction. Uch.zap.Mosk.un. no.177:  
53-60 '56. (MLRA 10:5)  
(Orlov Province--Engineering geology)



*SAMOYLOV, V.G.*

MOROZOV, S.S.; POLTEV, N.F.; SAMOYLOV, V.G.

Achieving water impermeability in soils of water basins by  
disturbing their structure with subsequent compression. Uch.  
zap.Mosk.un. no.177:139-170 '56. (MLRA 10:5)  
(Permeability) (Soil mechanics)

SAMOYLOV, V.G.

Device for laboratory determinations of the permeability of  
screens to solutions. Izv.vys.ucheb.zav.; geol.i razv. 5  
no.3:100-108 Mr '62. (MIRA 15:4)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.  
(Filters and filtration)

SAMOYLOV, V.G.

Work of the senior gas fitter A.F.Znakhurenko. Metallurg 10 no.3:12-  
13 Mr '65. (MIRA 18:5)

1. Donetskij sovet narodnogo khozyaystva.

AUTHORS:

Trukhan, V. I., Member of the Supreme Soviet of the USSR, and  
Foremen: Kopeykin, M. F.; Shtykh, A. P.; Samoylov, V. I.;  
Baldina, Ye. A.

92-58-5-3/30

TITLE:

Appeal to All Operators, Specialists and Workmen of the Most  
Important Professions in Enterprises of the Petroleum and Chemical  
Industry (Ko vsem operatoram, apparatchikam i rabochim vedushchikh  
professiy predpriyatiy neftyanoy i khimicheskoy promyshlennosti)

PERIODICAL:

Neftyanik, 1958, Nr 5, p 3 (USSR)

ABSTRACT:

This appeal to all operators, specialists and workmen of the petroleum and chemical industry enumerates the achievements attained by chemical industry workers in 1957 and it urges them to make a further effort to increase the output of fertilizers, synthetic rubber, paints, plastics, etc. It also urges them to improve processing methods by taking advantage of advanced techniques and automation. A pledge by various teams of chemical plants, shops and factories is included in this appeal. They pledge to improve operating conditions of processing units, to obtain better operational results, to overfulfill the annual production plan, and to hit new peaks in the output of chemicals. The results of operations carried out during the first quarter of 1958 indicate that the obligations undertaken by the chemical industry workers will be discharged in time.

Card 1/1

1. Petroleum industry-USSR 2. Chemical industry--USSR 3. Personnel  
--Pledges

SAMOYLOV, V.I.

Role of pituitary hormones in the hyperplasia of mammary glands. Biul.eksp.biol. i med. 55 no.1:104-107 Ja'63.

(MIRA 16:7)

1. Iz laboratorii eksperimental'noy gormonoterapii (zav. kand.biolog. nauk N.I.Lazarev) Instituta eksperimental'noy i klinicheskoy onkologii (dir. - deystvitel'nyy chlen AMN SSSR N.N.Blokhin) AMN SSSR, Moskva. Predstavlena deystvitel'nym chlenom AMN SSSR L.M.Shabadom.

(BREAST--DISEASES) (PITUITARY HORMONES)

SAMOYLOV, V.I.; ENGEL'GARDT, V.A., akademik, glav. red.; DEBORIN,  
G.A., zam. glav. red.; VASIL'YEV, Yu.M., prof., red.

[Biology of malignant growth] Biologiya zlokachestvennogo  
rosta. Moskva, Nauka, 1965. 254 p. (MIRA 18:6)

ZHOLENEV, I.N., kand.tekhn.nauk: SAMOILOV, V.I., inzh.

Investigating the properties of molding materials with the help of  
ultrasonic waves. Itt. proiz. no.7139-40 21 '65.

(MIRA 18:8)

SMIRNOVA, I.O.; SAMOYLOV, V.I.

Effect of extract taken from a mammary gland tumor on the folliculo-stimulating function of the hypophysis in rats, Biul. eksp. biol. i med. 59 no.4:92-94 Ap '65.

(MIRA 18:5)

1. Laboratoriya eksperimental'noy gormoterapii (zav. - kand. biologicheskikh nauk N.I. Lazarev) Instituta eksperimental'noy i klinicheskoy onkologii (dir. - deystvitel'nyy chlen AMN SSSR prof. N.N. Blokhin) AMN SSSR, Moskva.



L 10643-63

EWP(q)/EWT(m)/RDS--AFFTC/ASD--JD

ACCESSION NR: AP3001231

S/0078/63/008/006/1543/1545

AUTHOR: Kolbin, N. I.; Ryabov, A. N.; Samoylov, V. M.

54

TITLE: Solid ruthenium tetrachloride

SOURCE: Zhurnal neorganicheskoy khimii, v. 8, no. 6, 1963, 1543-1545

TOPIC TAGS: RuCl sub 4, RuCl sub 3

ABSTRACT: Solid RuCl sub 4 was obtained by condensing onto a liquid air-cooled surface the vapors of Ru chlorides and chlorine obtained by heating RuCl sub 3 in fused quartz equipment in a stream of chlorine at 750 degrees. RuCl sub 4 decomposes to the trichloride and chlorine at -30 degrees; the reaction is not reversible at this temperature. Orig. art. has: 1 table; 1 figure; 1 equation.

ASSOCIATION: none

SUBMITTED: 16Aug62

DATE ACQD: 01Jul63

ENCL: 00

SUB CODE: 00

NO REF SOV: 003

OTHER: 001

deo/CA

Card 1/1

SHUGAL', B.Ye.; SAMOYLOV, V.M.; VOROB'YEV, S.S., inzh., retsenezent;  
SAVKIN, I.P., inzh., red.

[Handbook on the use of cutting, percussion, upsetting and  
mechanized tools] Spravochnik po ekspluatatsii rezhushchego,  
udarnogo, vysadnogo i mekhanizirovannogo instrumenta. Mc-  
skva, Mashinostroenie, 1965. 343 p. (MIRA 18:10)

KOLBIN, N.I.; RYABOV, A.N.; SAMOYLOV, V.M.

Solid ruthenium tetrachloride. Zhur. neorg. khim. 8 no.6:  
1543-1545 Je '63. (MIRA 16:6)

(Ruthenium chlorides)

SAMOYLOV, V.N.

A piston manometer with constant effective area. Izv.tekh.no.4:  
50-52 '55. (MLRA 8:10)

(Manometer)